| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/818,006 | 03/27/2001 | Merrill W. Harriman | SAA-0058 | 2027 |

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|---|---|---|

SQUARE D COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
1415 SOUTH ROSELLE ROAD
PALATINE, IL 60067

| EXAMINER |
|---|
| CHRISTMAN, KATHLEEN M |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3713 | |

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | | Applicant(s) | |
|---|---|---|---|---|
| | 09/818,006 | | HARRIMAN, MERRILL W. | |
| | Examiner | | Art Unit | |
| | Kathleen M Christman | | 3713 | |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _03 March 2004_.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-29_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-29_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

## DETAILED ACTION

In response to the request for continued examination filed 03/03/2004, claims 1-28 and newly added

claim 29 are pending.

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for continued

examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

submission filed on 03/03/2004 has been entered.

### Specification

2. The use of the trademark POWERPOINT has been noted in this application. It should be

capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the

marks should be respected and every effort made to prevent their use in any manner which might

adversely affect their validity as trademarks.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

3.       Claim 28 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being

enabling for its teaching that programming of the programmable logic controller is accomplished via

inputs from a user, does not reasonably provide enablement for inputs coming solely from the user.  The

specification does not enable any person skilled in the art to which it pertains, or with which it is most

nearly connected, to make and use the invention commensurate in scope with these claims.

4.       Claims 15-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the

enablement requirement.  The claim(s) contains subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most

nearly connected, to make and/or use the invention. The limitation of a "training means" is not fully

described in the specification as originally filed.  The specification does not implicitly or inherently set forth

the structure, materials, or acts corresponding to a means-plus-function language in the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.       Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 12, the preamble of the claim recites "a method for training a user of software for

programming a programmable logic controller".  The first limitation of the claim recites "in response to the

user encountering difficulties with programming the programmable logic controller".  These statements

are unclear.  It is common knowledge that programming a programmable logic controller (PLC) is a two-

step process, consisting of a coding step and a programming step.  The first step is the creation of "code",

or a series of computer programming language instructions.  This step occurs through the use of a

software application.  The second step is the physical programming of the PLC.  In this step the PLC is

actually configured to perform functions according to the "code".  The step is usually performed with the

aid of a software program, which may or may not be the same program used to create the code.  This

step may also be performed manually, however it is only done so in the most rare of instances due to the complexity and extraordinary amount of time required to do such". The language of the claims is unclear as to in which of the above stages the applicant is operating. The language of the preamble appears to reflect that the method is applicable to the first stage, writing the "code". However, the language of the claims makes it appear that the method functions in response to the second step, programming of the PLC. Throughout the course of examination the examiner has interpreted the claims based upon the pre-amble description and has interpreted that the "difficulties" are encountered in the first step of the process, not the second. However, the applicant's arguments during prosecution have been directed to where the "programming inputs" are received. The arguments appear to refer to the actual step of "programming" not the coding step. Clarification of this issue is required. The system language of claim 15 presents the same unclear limitations.

Further regarding claim 15, the limitation of "training means" is indefinite. "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994). One of ordinary skill in the art would not be able to identify the structure, material or acts from the description in the specification for performing the recited function.

Claims 2-10, 13, 14, and 16-29 are rejected for their incorporation of one or more of the above through their dependencies.


### Claim Rejections - 35 USC § 103


The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.


1.      Claims 1-4, 6-11, 13-18, 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chiang et al (US 5535422) in view of Mustafa (US 2002/0059378 A1). Regarding claim 1, Chiang et al

teaches a system and method for training a user on a software product, wherein the user is provided a

training hyperlink option in response to the user encountering difficulties, or an error as in claim 3, with

programming, and linking the user to customized training resources addressing the difficulties based on

the information, so as to provide the user solutions to the difficulties (see col. 18: 65-67). Information is

retrieved upon selection of the training hyperlink; see the description of the "Show-Me" features. The

training hyperlink option provided in response to a request by the user (claim 2) is taught at col. 18: 55-

57. The information comprising data indicating at least one part of the software being used by the user

(claim 4) is taught at col. 19: 9-11.

Chiang et al fails to teach that information is communicated automatically over a communications

network (claim 1), that training resources comprise materials are: presented at an internet web-site (claim

6), are multimedia presentations (claim 7), or a link to a customer service representative (claim 8), that

the communications network is a secure network (claim 9) or a private internal network (claim 10), that

the training resources are modifiable (claim 13) and can be modified without changes to the software

(claim 14).

Mustafa teaches that a communications network for transferring help information in paragraph 04.

The various networks and types of training materials are taught in paragraphs 28-30. The ability to

modify the training resources without changing the product is taught in the description and use of the

"client profile". Specifically, see paragraph 41, which discusses downloading updated information to the

user.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to update the features of the Chiang et al invention with the on-line features of the Mustafa invention so as to provide for a more diverse help feature.

It is noted that neither the Chiang et al nor Mustafa inventions are directly drawn to the "software for programming a programmable logic controller". It is the examiner's position that the specific claimed application of the software is not a patentably distinguishing feature. It is old and well known in the art that various software packages may be used during the process of writing the code for programming a programmable logic controller. The Chiang et al invention is drawn to providing help when a user encounters difficulties in a generic software program and as such is equally applicable to any software product. The Mustafa invention is drawn to a general help feature and not limited to any particular product. As no stated problem has been solved nor unexpected result achieved the implementation of the help system in the software product for programming a PLC is deemed a matter of design choice.

Claims 15-18, and 20-24 are a system which corresponds in scope to the method claims 1-4, 6-11, 13 and 14, respectively, and are rejected for the same reasons.

Regarding claims 25 and 26, the limitations of these claims are taught in the "Monitoring User Actions" section of Chiang et al, see col. 15.

Regarding claim 27, the claim represents an intended use of the user device as it is disclosed in claim 15. It is the examiner's position that the computer system of Chiang et al is capable of performing this function.

Regarding claims 28 and 29, the examiner takes OFFICIAL NOTICE that it is an old and well-known principle in the educational field that student's learn a task more efficiently when they perform the task, rather than by having the task performed by them. As such it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Chiang et al invention to provide the student with a "walkthrough" type feature allowing the student to perform the steps necessary to overcome any difficulties encountered instead of having the computer tutorial system perform these steps.

2.      Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al

(US 5535422) in view of Mustafa (US 2002/0059378 A1) further in view of Gardner et al (US 5239617).

Chiang et al and Mustafa teach all the limitations of the claimed invention as shown above accept for the

information containing data indicating at least one particular error made by the user.  Gardner et al clearly

teaches this ability at col. 5: 4-9.  It would have been obvious to one of ordinary skill in the art to combine

the abilities of Gardner to point out a specific error with the inventions of Chiang et al and Mustafa so as

to provide an intelligent help system which is tailored to the user's specific needs.

### *Response to Arguments*

6.      Applicant's arguments filed 03/03/2004 have been fully considered but they are not fully

persuasive.

<u>35 USC §112, first paragraph rejection of claim 28</u>

Applicant has made arguments directed to this rejection in the currently submitted

response.  Arguments presented in the amendment filed 02/05/2004 direct the examiner to Figure

3 to show support for the limitation of claim 28.  The examiner agrees that this figure, along with

several portions of the specification support that programming inputs can come from the user,

however the limitation of claim 28 states that the programming inputs come "only" from the user.

The specification and drawings as originally filed do not support this narrow limitation in the claim

language.  At page 9, line 24 through page 10 line 6 applicant's specification recites:

"It will be understood by those skilled in the art that all of the blocks and signals depicted
in the Figures represent interactions and functional entities which preferably will be implemented
by combinations of hardware and software. It will also be understood that these entities will not
necessarily be entirely distinct from each other in practice, nor will the interactions preclude
intermediate steps, nor do these entities and interactions preclude additional entities and
interactions supplementing or enhancing the present invention. It is also to be understood that the

best mode embodiments described herein are only illustrative of the general concepts that we
have invented. People skilled in the art will realize that numerous rearrangements and
permutations can be made to these best mode embodiments, without departing from the spirit or
scope of the present invention."

This statements clearly show the broader concept intentions of the applicant's invention and as
such show that the narrow limitation of programming inputs only coming from the user, is not
enabled by the specification as originally filed.

## Rejection of claims 1-11 and 13-28 under 35 USC §103

Applicant only argues the limitations of claims 1 and 15. Applicant's primary arguments
are directed to the assertion that the Chiang et al reference performs the next step of the
programming and does not "assist the user to proceed with programming", as recited in the
claims. The examiner re-emphasizes the remarks made in the action mailed 12/03/03. There is
nothing in the claim recitation that states that customized training resources cannot and do not
perform a step of the task, particularly the step where the user encounters a difficulty. The
examiner agrees that the show-me feature of Chiang does perform the next-step or action of the
programming process, see col. 18: 54-55. However the claim states the materials provide a
solution to the difficulties (performing the required step is a reasonable solution to the difficulties)
and assists the user in continuing to program. It is clear that once this step is completed the user
will be able to continue on their task of finishing the program.

### *Conclusion*

7.     The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

       a.     Harrison et al (US 5898462)-supports the official notice taken in regards to claim 28 and
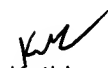
       29
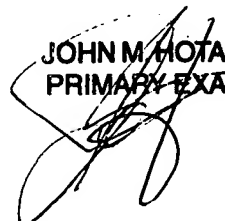
b.     Linberg (US 6386882 B1) teaches a system for providing training on the software associated with a medical implant

c.     McKirchy (US 2002/0154155 A1) teaches a pop-up help system with multiple degrees of help

d.     Shulman et al (US 6311323 B1) teaches a help system which builds user input statements in a computer programming language software product

e.     Fang (US 6628311 B1) teaches a help system which includes pop-up help and hyperlink controls

f.     Feldman (US 6297822 B1) teaches a help display system specific to computer programmers


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Christman whose telephone number is (703) 308-6374. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on (703) 308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kathleen M. Christman

JOHN M. HOTALING, II
PRIMARY EXAMINER